

In the Claims:

Please amend the claims as follows:

1. (currently amended) Auxiliary power supply equipment for a high voltage installation (1, 7, 8), having a power source (3) at ground potential, a load circuit (4) at high potential, and a transmission link (5, 6) for coupling the power source to the load circuit, ~~characterised in that wherein~~ the power source comprises a high frequency voltage generator (31), the transmission link comprises a first (5) and a second (6) current path, each path being closed by capacitive coupling (51, 61, 61') to provide insulation between the ground potential and the high potential, and each current path having a reactive compensation means (52, 62, 53, 312, 63, 313, 62', 53', 414, 63', 413) for series compensation of reactive power generated by the capacitive coupling.
2. (currently amended) Auxiliary ~~The auxiliary~~ power supply equipment according to claim 1, ~~characterised in that wherein~~ said reactive compensation means comprises an inductor (52, 62, 62', 53, 63, 53', 63') in series connection with the capacitive coupling.
3. (currently amended) Auxiliary ~~The auxiliary~~ power supply equipment according to any of claims 1-2, ~~characterised in that it comprises~~ claim 1, further comprising: means (32, 41, 53, 312, 63, 313, 412', 53', 414, 63', 413) for adaptation of the power source to the load circuit by impedance matching.
4. (currently amended) Auxiliary ~~The auxiliary~~ power supply equipment according to

~~any of claims 1-3, characterised in that claim 1, wherein~~ the first and the second current path each comprises a series connection of the reactive compensation means and a coupling capacitor (51, 52) coupled to a conductor (2) at the high voltage installation.

5. (currently amended) ~~Auxiliary~~ The auxiliary power supply equipment according to ~~any of claims 1-3~~ claim 1, wherein the high voltage installation is a series capacitor equipment (7) mounted on a platform (8) insulated from ground, ~~characterised in that~~ wherein for one (6) of said current paths said capacitive coupling is provided by a stray capacitance (61') between said platform and ground.

6. (currently amended) ~~Auxiliary~~ The auxiliary power supply equipment according to ~~any of claims 1-5~~ claim 1, wherein said voltage generator generates a voltage of a pre-selected frequency, ~~characterised in that~~ wherein in each of said current paths said reactive compensation means are selected to form a series resonant circuit with said capacitive coupling at the pre-selected frequency.

7. (currently amended) ~~Auxiliary~~ The auxiliary power supply equipment according to claim 5, ~~characterised in that~~ wherein one (5) of said capacitive couplings is provided by a coupling capacitor (51) that is coupled to a conductor (LV) at the high voltage installation and coupled to ground potential via said reactive compensation means (53, 312), and ~~in that~~ wherein said voltage generator is capacitively coupled to the junction between the reactive compensation means and the coupling capacitor.

8. (currently amended) Auxiliary The auxiliary power supply equipment according to any of claims 1-4 or to claim 6, when claim 6 depends on any of claims 1-4, characterised in that claim 1, wherein said capacitive couplings are provided by coupling capacitors (51, 61) coupled to a conductor (2) at the high voltage installation and coupled to ground potential via said reactive compensation means (53, 312, 63, 313), and in that wherein said voltage generator is capacitively coupled to the junctions between the respective reactive compensation means and the coupling capacitors.

9. (currently amended) Auxiliary The auxiliary power supply equipment according to any of claims 1-4 or to claim 6, when claim 6 depends on any of claims 1-4, characterised in that claim 1, wherein said capacitive couplings are provided by coupling capacitors (51, 61) that are coupled to a conductor (2) at the high voltage installation and coupled to ground potential via the reactive compensation means (52, 62), and in that said voltage generator comprises a ground level transformer (32) and a high frequency DC/AC-converter (31), said ground level transformer having a primary winding (321) coupled to the DC/AC-converter and a secondary winding (322) coupled to said transmission link.

10. (currently amended) Auxiliary The auxiliary power supply equipment according to any of claims 8-9 claim 8, wherein each of said reactive compensation means comprises an inductor (52, 62, 53, 63, 53', 63') with a winding, characterised in that wherein the windings are magnetically coupled to each other so that said current paths exhibit a low impedance for common mode currents.

11. (currently amended) Auxiliary ~~The auxiliary power supply equipment according to claim 9, characterised in that in that wherein~~ said capacitive couplings are provided by coupling capacitors (~~51, 61~~) coupled to a conductor (~~2~~) at the high voltage installation via said reactive compensation means (~~53', 414', 63', 413~~), and ~~in that wherein~~ said load circuit is capacitively coupled to the junctions between the respective reactive compensation means and the coupling capacitors.

12. (currently amended) Auxiliary ~~The auxiliary power supply equipment according to any of claims 1-11, characterised in that claim 1, wherein~~ said load circuit (~~4~~) comprises a load transformer (~~41~~) and an AC/DC-converter (~~42~~), said load transformer having a primary winding (~~412~~) coupled to said transmission link, and a secondary winding (~~411~~) coupled to said AC/DC-converter.

13. (currently amended) Method ~~A method~~ for supplying auxiliary power to a high voltage installation (~~1, 7, 8~~), ~~having the steps of the method comprising:~~

generating power at ground potential,

forming a load circuit (~~4~~) at high potential, and

transmitting the generated power to the load circuit, ~~characterised in that the step of wherein~~ generating power comprises ~~the step of~~ generating a high frequency voltage power, and ~~the step of wherein~~ transmitting the generated power to the load circuit comprises ~~the step of~~ forming a first (~~5~~) and a second (~~6~~) current path, each path closed by a capacitive coupling (~~51, 61, 61'~~) to provide insulation between the ground potential and the high potential, ~~the step of~~ transmitting the auxiliary power via said capacitive couplings, and ~~the step of~~

providing in each current path a reactive compensation means (52, 62, 53, 312, 63, 313, 62', 53', 414, 63', 413) for series compensation of reactive power generated by the capacitive couplings.

14. (currently amended) ~~Method~~ The method according to claim 13, ~~characterised in that the step of wherein~~ providing in each current path a reactive compensation means comprises the step of providing an inductor (52, 62, 62', 53, 63, 53', 63') in series connection with the capacitive coupling.

15. (currently amended) ~~Method~~ The method according to any of claims 13-14 ~~claim 13~~, wherein ~~the step of generating a high frequency voltage power makes use of a power source (3), characterised in that it and~~ comprises the step of adapting the power source to the load circuit by impedance matching.

16. (currently amended) ~~Method~~ The method according to any of claims 13-15, ~~characterised in that the step of claim 13, wherein~~ transmitting the generated power to the load circuit further comprises the step of providing in each of said first and the second current paths a series connection of the reactive compensation means and a coupling capacitor (51, 52) coupled to a conductor (2) at the high voltage installation.

17. (currently amended) ~~Method~~ The method according to any of claims 13-15 ~~claim 13~~, wherein the high voltage installation is a series capacitor equipment (7) mounted on a platform (8) insulated from ground, ~~characterised in that the step of wherein~~ transmitting the power via a capacitive coupling comprises the step of using a stray capacitance (61') between said platform

and ground to form said capacitive coupling.

18. (currently amended) ~~Method~~ The method according to ~~any of claims 13-17~~, characterised in that ~~the step of claim 13, wherein~~ generating a high frequency voltage power comprises ~~the step of~~ pre-selecting a frequency for the voltage, and ~~the step of~~ wherein providing in each current path a reactive compensation means comprises ~~the step of~~ selecting said reactive compensation means to form a series resonant circuit with said capacitive coupling at the pre-selected frequency.

19. (currently amended) ~~Method~~ The method according to claim 17, characterised in that ~~the step of~~ wherein transmitting the auxiliary power via a capacitive coupling comprises ~~the step of~~ using a coupling capacitor (51) that is coupled to a conductor (2) at the high voltage installation and coupled to ground potential via said reactive compensation means (53, 312), and in ~~the step of~~ capacitively coupling the generated high frequency voltage power to a junction between the reactive compensation means and the coupling capacitor.

20. (currently amended) ~~Method~~ The method according to ~~any of claims 13-16, or claim 18, when claim 18 depends on any of claims 13-16,~~ characterised in that ~~the step of claim 13, wherein~~ transmitting the power via a capacitive coupling comprises ~~the step of~~ using coupling capacitors (51, 61) that are coupled to a conductor (2) at the high voltage installation and coupled to ground potential via said reactive compensation means, and in ~~the step of~~ capacitively coupling the generated high frequency voltage power to a junction between the respective reactive compensation means and the coupling capacitors.

21. (currently amended) Method The method according to any of claims 13-16, or claim 18, when claim 18 depends on any of claims 13-16, characterised in that the step of wherein transmitting the power via a capacitive coupling comprises the step of using coupling capacitors (51, 61) that are coupled to a conductor (2) at the high voltage installation and coupled to ground potential via said reactive compensation means, and in the step of inductively couple the generated high frequency voltage power to said current paths.

22. (currently amended) Method The method according to any of claims 20-21 claim 20, wherein each of said reactive compensation means comprises an inductor (52, 62, 53, 63, 53¹, 63²) with a winding, ~~characterised in that it comprises the step of wherein the method further comprises~~ magnetically coupling the windings to each other so that said current paths exhibit a low impedance for common mode currents.

23. (currently amended) Method The method according to claim 21, ~~characterised in that the step of wherein~~ transmitting the power via a capacitive coupling comprises the step of using coupling capacitors (51, 61) that are coupled to a conductor (2) at the high voltage installation via said reactive compensation means, and ~~in the step of capacitively couple coupling~~ the transmitted auxiliary power to the load circuit.

24. (currently amended) Method The method according to any of claims 13-22, ~~characterised in that the step of claim 13, wherein~~ transmitting the power via a capacitive coupling comprises the step of using coupling capacitors (51, 61) that are coupled to a conductor

(2) at the high voltage installation, and in the step of inductively couple the transmitted auxiliary power to the load circuit.